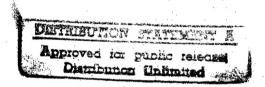
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30 August 1984

# Worldwide Report

**EPIDEMIOLOGY** 



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MEASLES EPIDEMIC REPORTED IN 6 PROVINCES, 18 DEAD

Are the first

Vaccination Campaign Faulted

Buenos Aires LA NACION in Spanish 17 Jul 84 pp 1, 13

[Excerpts] "The situation is serious and quite worrisome" because what we have is a "measles epidemic," said Dr Lea Cora Figallo, the undersecretary of Health Care Programs of the Health and Social Action Ministry, during a press conference in which she talked about the reasons for the increase in the number of cases throughout the country and the steps that have been taken to counter it.

Dr Figallo asserted that the ministry was genuinely worried about the current measles epidemic, inasmuch as there has been a sharp rise in the number of cases in spite of the intensive vaccination drives.

"There is more than enough vaccine," she said, "but the vaccination programs are not working among some segments of the population in areas such as Greater Metropolitan Buenos Aires, where perhaps insufficient emphasis has been placed on the serious complications of this disease, as we can see from the fact that there have been 11 fatal cases so far this year."

The head of the Epidemiology and Immunization Section, Dr Maria Elena Vera de Vazquez, asserted that there were 7,106 cases in 1983, compared to 3,447 as of mid-June 1984, almost 2,500 more than at the same time last year.

According to a report from the Health and Social Action Ministry, the hardest hit areas have been Buenos Aires, Mendoza, Misiones, San Juan, Santa Fe and Rio Negro.

Dr Figallo said that the vaccine should be first administered before the age of 1, with a booster shot a year later. She explained that many mothers do not take their children to get this booster shot, and they therefore have insufficient immunity. Some children are not vaccinated at all, she mentioned. "The reason is lack of information, not parental indifference, as our campaigns have perhaps not been publicized enough," she added.

The undersecretary of Health Care Programs stated that screenings were being conducted at every school in the country and that every child who is found to be not completely vaccinated is inoculated immediately.

"Vaccinations are done free of charge at every hospital. So, any parents who do not want to wait for the screening at school can take their children to any hospital," Dr Figallo underscored, "and we urge them to take their children to a physician if the slightest symptom of general weakness or a cold should arise."

She pointed out that some areas, such as major urban centers, lack systematic programs that can guarantee complete coverage and that the same population groups are probably being inoculated over and over. She added that there is no other explanation for the fact that some groups have not been vaccinated, given the estimates of how much vaccine is available for the entire population.

#### Campaign

The official stated that "we are going to aim a vast publicity campagin at them, along with a major vaccination program," inasmuch as the data show that a high percentage of children have not been inoculated.

This is less common in the poorest provinces, she noted, because they have health care systems in place that bring the population closer to health care centers.

#### Statistics

The following are the numbers of cases in 1983 (second figure) and up mid-June of this year (first figure):

Total, 3,445 and 870; Federal Capital, 59 and 25; Buenos Aires, 2,149 and 288; Catamarca, 0 and 6; Cordoba, 50 and 31; Corrientes, 46 and 23; Chaco, 11 and 12; Chubut, 2 and 0; Entre Rios, 19 and 10; Formosa, 43 and 196; Jujuy, 25 and 15; La Pampa, 5 and 1; La Rioja, 70 and 21; Mendoza, 126 and 26; Misiones, 518 and 26; Neuquen, 2 and 2; Rio Negro, 69 and 3; Salta, 34 and 81; San Juan, 70 and 6; San Luis, 8 and 5; Santa Cruz, 8 and 7; Santa Fe, 71 and 29; Santiago del Estero, 10 and 13; Tucuman, 50 and 44; Tierra del Fuego, Antarctic and South Atlantic Islands, no reports.

#### Preschoolers Victims

Buenos Aires LA NACION in Spanish 27 Jul 84 p l

[Text] La Plata--As of yesterday, 18 preschool children have died in the southern part of Greater Buenos Aires and in this capital as a result of the measles epidemic. The figures were made public by the director of Sanitation Medicine of the Health Ministry, Dr Oscar Palma Beltran. He added that the reported cases of measles now number 2,576 in the province.

Dr Palma Beltran pointed out that 64 percent of the cases are in an area between the Buenos Aires metropolitan area and Greater La Plata. In the judgment of the authorities, he went on to say, the epidemic is due to non-vaccination or to the administering of just one of the two doses needed for immunity.

He also announced that in 6 days a mass vaccination program would be conducted with the collaboration of primary and preschool teachers, who will survey their students to ascertain which of them have not been inoculated. The screening will be extended to their families, and personnel will be sent immediately to their homes to vaccinate any members who have not yet been immunized.

He also said that the municipality of La Plata's door-to-door canvassing in the neighborhoods hardest hit by the epidemic would be repeated in other jurisdictions.

He mentioned as well that only 409 cases of measles were reported all last year.

#### In Lanus

The Municipality of Lanus announced that as a preventive measure children between 9 months and 12 years of age who have not had measles must be vaccinated. The next inoculation session will start tomorrow at Center No 39, Villa Esperanza, at the intersection of Hernandarias and Gobernador Ugarte.

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TYPHOID CASES--MANAMA--Contaminated water and homemade ice cream as well as the hot weather has raised the toll of typhoid victims in Bahrain to 91 treated cases this week from 34 last week, compared to last year's 58 casualities, it was announced today. Health officials said that the epidemic, which has hit people aged between five and 25 years mainly in the Sitra industrial area, where the disease was suspected to have started, had reached its peak. Some 10,000 people have been vaccinated against the disease. The health ministry, in its campaign to halt the spread of the epidemic, has increased the chlorination level in the water supply on the island. Also, regular inspections of shops and houses is being carried out, mainly in Sitra. The disease reached its highest level in 1982 with 228 patients treated. [Text] [Dubayy KHALEEJ TIMES in English 27 Jul 84 p 4]

BAGERHAT DIARRHEA EPIDEMIC--Bagerhat, June 22:--Diarrhoea has broken out in an epidemic form in Bagerhat district last month. The disease has so far claimed the lives of 84 persons in different upazilas of the district. According to a report from Health Department sources 22 persons died at Bagerhat district. Acute scarcity of saline and other medicines in the different upazila health complexes was the main cause of death. Large scale medicinal measures are required to check the spread of this disease. [Text] [Dhaka THE BANGLADESH OBSERVER in English 23 Jun 84 p 7]

CHOLERA IN CHANDPUR--Faridganj, June 26: Cholera claimed seven lives and attacked 70 persons during the last six days in different parts of Chandpur and Faridganj upazilas in Chandpur district. According to reports, four persons died of cholera in Chandangazibari, one at Beratibari and one at Paribar of village Deychar under Faridganj upazila. The last one was reported from Tarpurchandi village under Chandpur upazila. Pure drinking water is prevailing in the areas, it is learnt. [Text] [Dhaka THE NEW NATION in English 27 Jun 84 p 2]

VIRAL FEVER IN CHITTAGONG--Chittagong, June 4--The virus fever now has broken out in Chittagong in epidemic form affected nearly 70 PC people during last one week. According to Civil Surgeon, Chittagong, almost every family has been falling victim to this severe but not fatal disease. A with the virus affection the body temperature rise up to 103 degree to 104 degree. The temperature remains constant for two to three days with excessive headache and then recedes slowly developing a severe pain in the body. According to the expert there is no effective medicine to fight the disease but to take complete rest with measures to prevent temperature from rising is the only contrivance to fight it. Elderly people of the locality say that such fever recurs in cycle every fifty years as an omen to catastrophe. [Text] [Dhaka THE NEW NATION in English 6 Jul 84 p 2]

DIARRHEA IN PIRGANJ--Pirganj, (Thakurgaon) July 3: Twenty three persons died of diarrhoea and bacillary dysentery and about 500 persons attacked with the diseases during the last 10 days in different villages under Pirganj upazila, according to unofficial sources. When contacted the Upazila Health Administrator admitted the deaths of 12 persons. The affected villages are Malikpur, Kastore, Bhakura, Jasaipara, Koshadangipara, Khongaon, Ransia, Borobari, Jaborhat and Raghunathpur. [Text] [Dhaka THE NEW NATION in English 4 Jul 84 p 2]

DHAKA FLU EPIDEMIC -- A different kind of flu has hit Dhaka city in an epidemic form. According to a survey, there is hardly any family which has escaped the attack of this viral disease. A doctor told the TIMES that people ranging from 5 years to 60 years suffered from the disease, high temperature, pain all over the body and severe cough are the symptoms of this flu, he said. A Physician said that the flu was 'smuggled' by the travellers from abroad. A Bangladeshi national who had recently returned from India, told the TIMES that he contacted the virus during his visit to 'Ajmeer' and remained in bed for about three days. Peculiar aspects of this flu are high temperature for young patients Talking to the TIMES, a and severe cough when temperature starts receding, patient who recovered from flu two days back, said that he was still weak. can't work and I feel like sleeping. I am very weak, he said. The patient said that the virus attacked him so severely that he remained in bed for three days without food and without medicine. [Text] [Dhaka THE BANGLADESH TIMES in English 5 Jul 84 pp 1, 8]

RAJSHAHI DIARRHEA PATIENTS—Rajshahi, July 5: Sixty patients attacked with diarrhoea were admitted into Rajshahi Medical College Hospital within four days from July 1 to July 4. According to the doctors of the hospital, the patients attacked with the disease are mostly young and old aged. After the end of month—long fasting abrupt eating and unbearable hot climate caused the massive attack of the disease, the doctors said. Besides, a good number of diarrhoea attacked patients are being locally treated, it is learnt. [Text] [Dhaka THE NEW NATION in English 7 Jul 84 p 2]

KISHOREGANJ DIARRHEA DEATHS—Kishoreganj, July 7: Diarrhoea diseases took atoll of 80 lives in one month in different areas of Koshoreganj district. About 400 others were affected. Most of the victims were children and females. It is learnt that the diseases have broken out in an epidemic form in many places under the district and the worst-affected areas fall under Austgram, Itna, Mitamain, Nikli, Tarail and Katiadi upazilas. It has been alleged that scarcity of pure drinking water is one of the main problems in these areas Oral Rehydration Saline Cholera vaccine and other drugs necessary to combat the diseases are not available with the health officials though these are easily available in the market at exhorbitant prices at certain places. The poor people can ill-afford these medicines and fall easy prey to the diseases. Terming the disease as strong diarrohea, an official source admitted 21 deaths and said that adequate measures were being taken and huge quantities of oral saline had already been sent to the health centres. [Text] [Dhaka THE BANGLA-DESH TIMES in English 8 Jul 84 p 2]

CSO: 5450/0074

#### MEASLES OUTBREAK IN LOROLWANE

# Gaborone BOTSWANA DAILY NEWS in English 18 Jun 84 p 2

# [Article by Desmond Montshiwa]

### [Text]

LOROLWANE, JUNE 18: A measels epidemic has been reported in Lorolwane village in the Molopo area, affecting over 34 primary school pupils and at least two adults.

An emergency staff meeting at the school recently resolved to send a letter to the Mabule clinic which is over 60 kilometers away while a copy was sent to the Principal Education Secretary in Kanye.

The MP for Ngwaketse-/Kgalagadi, Mr Michael Tshipinare was informed about the situation by the residents at a kgotla meeting which he addressed on Wednesday, last

He was told that the Southern District Council had claimed there was no transport available and that the only vehicle at Mabule Clinic had a breakdown on the road to the CDC farms.

Mr Tshipinare said in an interview that he was perturbed at the attitude which the council adopted when treating emergency cases.

"They seem to give this delicate issue little regard," he said.

According to the Headteacher of Lorolwane Primary School, Mr Kenneth Magashula, he was alerted about the epidermic last month after the Family Welfare Educator had noticed symptoms in one of the school children.

He said a few cases were treated on the 30th by a team of nurses, two from Lobatse and one from Mabule Clinic. They advised that the victims should be isolated from the unaffected and not share domestic utensils such as blankets, with others.

The school authorities however, have described the medical opinion as invalid because residents with large families are forced to live in single mud huts.

"In that case most children from poor families have no alternative but to share blankets in view of the cold weather along the Molopo river," said Mr Magashula.

He said that on June 4, at least 34 children from standard one to five suffering from measels, had failed to attend classes.

MEASLES CASES ON INCREASE--FRANCISTOWN, July 18: At least 65 persons were registered to have contracted measles, said a spokesman of the Jubilee Hospital here. Those receiving hospital treatment included 12 children aged between 8 and 15, added the spokesman in a telephone interview. The reports of measles outbreaks came from the town as well as the villges of Tonota, Zwenshambe, Maitengwe, Mapoka, Sebina, Tutume and Nkange. The Jubilee Hospital authorities said up to 10 cases a day of the disease were registered with the hospital since July 1 this year. They said the symptoms of measles were fever, cought, sore eyes, diarrhoea, vomiting and loss of appetite and rash which broke all over the body. Parents who noted such symptoms were advised to keep children indoors, to bathe them in cold water and to take them to the hospital as soon as possible. Delay in getting such patients to hospital could result in them contracting pneumonia, blindness or even death, they warned. A snapsurvey by reporters showed that the Tati town clinic reported the highest number of measles cases, 48, which were referred to the Hospital between May and July this year. The number was, however, low when compared to the cases which were reported last year, said the nursing sister at Tati town clinic, Mrs O Mululwane. Although the fact figures were not immediately available, she attributed the decline to a vaccination campaign which was carried out on children last year. [Text] [Gaborone BOTSWANA DAILY NEWS in English 19 Jul 84 p 2]

MEASLES OUTBREAK AT KGAGODI--KGAGODI, July 26: The Regional Medical Officer in Selebi-Phikwe intends visiting Kgagodi after receiving reports of an outbreak of measles in the area. According to Miss Joyce Sethibame, an enrolled nurse in charge of the village health post, over 100 children are believed to have been infected but only six of these have been treated at the clinic. Although the outbreak had not yet been reported to the relevant authorities, Miss Sethibame appealed for assistance in the eradication of the disease. She also complained that the health post was not provided with sufficient medical facilities, and that orders for drugs took a long time to be delivered. She further appealed to the Regional Health Unit to immunise all children so as to prevent serious outbreaks of this nature. Miss Sethibame noted that many children are reported to have sopped attending school. The surrounding villages of Mogapinyana and Diloro are also believed to have been infected by the disease. [Text] [Gaborone BOTSWANA DAILY NEWS in English 31 Jul 84 p 2]

BRAZIL

#### BRIEFS

MEASLES OUTBREAK--The measles outbreak continues in Sao Paulo. The number of children hospitalized has increased in most hospitals. Up to this time 125 children with measures have been hospitalized. Regarding the death toll, the Health Secretariat will release new figures this afternoon, although the latest report indicates that 49 children died between January and June. [Summary] [Sao Paulo Radio Bandeirantes in Portuguese 1555 GMT 25 Jul 84 PY]

MASSIVE VACCINATION CAMPAIGN--Nearly 70,000 children ranging in age between 9 months and 4 years were vaccinated against measles on 28 July during a massive vaccination campaign in greater Sao Paulo, health officials have said. [Excerpt] [Sao Paulo Radio Bandeirantes Network in Portuguese 1000 GMT 30 Jul 84 PY]

WINDSOR-ESSEX CHLAMYDIA INCIDENCE--Most area doctors are failing to diagnose a sexually transmitted disease that is about as common as herpes and more serious, says a physician at the Metro Windsor-Essex County Health Unit. The disease called chlamydia can cause infertility in women if untreated, but the symptons are often misdiagnosed or not detected, says Dr. Helena Jaczek. "A majority of doctors are not checking for it," said Dr. Jaczek, who works at the health unit's family planning clinic. "It's disappointing. It's not something there's a very high awareness of at all." She estimates that roughly seven per cent of the young sexually active population has the disease. Many estimates put the incidence of herpes at around 10 per cent. But though herpes lacks a cure, it rarely poses a major health problem and does not cause infertility, Dr. Jaczek said. At the health unit's family planning clinic chlamydia is found in seven per cent of tested patients, while gonorrhea is found in a maximum of two per cent. At the health unit's sexually-transmitted disease clinic chlamydia is found in 18.4 per cent of patients, while gonorrhea is found in 24 per cent. [Excerpts] [Windsor THE WINDSOR STAR in English 27 Jun 84 pp A1, A2]

CSO: 5420/1

COLOMBIA

#### BRIEFS

OUTBREAK OF DISEASES—Colombia's Regional Health Service has reported that seven persons have died of tetanus in El Sarare, and two other persons died of yellow fever in the La Pica and Puerto Lleras rural zones. Meanwhile, according to the Magdalena Health Service, two died of dengue in Los Negritos, El Banco Municipality. Several people have also died of hemorrhagic dengue in Las Animas, southern Choco Department. [Summary] [Bogota EL TIEMPO in Spanish 28 Jul 84 p 2 B PA]

#### FINLAND

TUBERCULOSIS MAY AGAIN BECOME 'FINLAND'S NATIONAL DISEASE'

Helsinki HELSINGIN SANOMAT in Finnish 10 May 84 p 6

[Article by Maire Vaajakallio: "Tuberculosis Has Not Yet Been Defeated in Finland, About 2,000 Cases Detected Yearly"]

[Text] Tuberculosis may again become a national disease in Finland. Risk of the illness is greatest among the elderly.

According to Councilor of Medicine Sakari Haro, not enough attention has been given to the tuberculosis risk. It has not been charted socially. Actions to keep tuberculosis under control should be directed toward the group of aged people.

"There is no reason for hysteria, but also none for indifference. The turberculosis bacillus is rather dangerous. Every grandmother who rocks in her rocking chair with grandchildren all around and the bacillus inside her is a national danger."

Tuberculosis infecting a young person transfers its risk of contagion 50-100 years forward. If we now act in a lax manner, we will still have to maintain hospital beds into the next millenium and will again have to observe tuberculosis as a national defense.

An illness is defined as a national disease when it endangers the well-being of the people. Tuberculosis was that before the war.

Last winter Haro returned from a health-care planning assignment in Indonesia, where the councilor of medicine saw what tuberculosis still is.

"For example, the situation in the slums of Jakarta is unbelievable. One only has to recall what kinds of risks are caused by international visits," says Haro.

At one time Finland was one of the black spots on the world tuberculosis map. The situation has developed extremely favorably here in the last decades, and tuberculosis has disappeared from most of the population.

One in a Thousand Gets Infected

Nowadays about one out of a thousand gets tuberculosis infection, and not all of these become ill. Furthermore, the danger of infection is being reduced by 15 percent annually. According to Councilor of Medicine Haro, no country has succeeded in preventing the spread of tuberculosis faster than this.

Even four years ago, when no one in Finland died of other contagious diseases, quite a number did die of tuberculosis. They were all elderly people, who had caught the tuberculosis infection in their active years.

The generations born before the war and even during the war, carry the tuberculosis infection within them. It is a risk, because if the condition of a person who has the infection weakens, the tuberculosis can come out of its tubercle. "It has its strategy," says Haro. "It is a microbe adapted to humans, which uses people for its own good and comes to divide up the prey at the same time others strike."

Problems of the Elderly

Every year more than 5000 Finns become 80 years old. One fourth of them are continually bedridden. "This social time bomb would justify a reevaluation very soon," Haro notes.

"If the danger is recognized in time, there will only be scattered cases in the year 2000. We need information about the size of the problem, knowledge about maintaining the right quality of life, a few laws and some public money," Haro recounts.

Last year 1982 new tuberculosis cases were registered in Finland. Of these, 1390 were tuberculosis of the respiratory organs, and 492 were other kinds. The previous year's figure was 2,170. TB has decreased in the statistics almost every year.

According to law, citizens must still undergo tuberculosis screening tests. "Screening through small [X-ray] pictures, calmette-innoculations, and work to combat tuberculosis have not been rejected," says Pertti Weckstrom of the Bureau of Medicine.

Calmette-innoculations Will Be Continued

The Bureau of Medicine's task group considered at length whether there was reason to continue calmette-innoculations, which Sweden, among others, has given up and Switzerland, for example, has never done. The decision was that the innoculations will continue, but new directions will be given. According to Weckstrom they will be ready this year.

A new tuberculosis law is also coming after 15 years of preparation. The goal is that TB sanatoriums will become parts of central hospitals and tuberculosis offices [will become] polyclinics.

The spirit of the new law has been achieved in Central Finland. The Kinkomas sanatorium has become a special hospital of the central hospital of Central Finland, a 117-bed lung clinic. According to Karl-Erik Kreus, chief physician of the Central-Finland tuberculosis district, at most 25 of these beds will be needed for care of tuberculosis patients.

Kreus says that the tuberculosis situation in Central Finland is not at all alarming. There are fewer new cases each year, and 95 percent of them affect old people. Even for them the cases are not actually "new," but an old infection has flared up after [the patient's] condition worsened.

Most of the cases are detected in the offices of general practictioners in health centers or of private doctors. About one-third of the cases are found through small X-ray pictures. Chief physician Kreus is satisfied with the alertness of the health centers and the speed with which the cases are cared for.

Whereas before a TB patient would be kept in bed for months, hospital care now lasts only for the time of tests and restoration of good condition, perhaps two weeks. After that the patient treats himself with medicines for 6-9 months and comes in for examinations.

# LABORATORY RESEARCH PROGRESS IN LEGIONNAIRES' DISEASE REPORTED

Helsinki HELSINGIN SANOMAT in Finnish 12 Jul 84 p 8

[Article: "Legionnaires' Disease Set Off Debate: Much Room for Interpretation in Laboratory Procedures"]

[Text] There is not necessarily any controversy between the University of Turku and the National Health Institute in regard to Pieksamaki's Legionnaires' disease. "It is more a question of differing interpretations of the results," says professor Arje Scheinin of the University of Turku.

Assistant professor Timo Kosunen of the University of Helsinki's Institute of Serobacteriology is of the same opinion: "The difference may be in the way researchers draw conclusions. The reason for this may be test procedures of varying sensitivity, among other things."

The University of Turku's institute of medical biology has found indicators of Legionnaires' disease or a sickness caused by a bacterium of the same type in 57 patients from Pieksamaki. The researchers base their results on the fact that antibodies against these bacteria have been found in the patients' blood.

The National Health Institute has been noticeably more cautious in its statements. According to it, illness is not shown just by the presence of antibodies, but by changes in their amount. According to the institute, it is rather unlikely that legionella diseases would have appeared in Pieksamaki, at least during the past year.

People take bacteria into their systems continually, for example in food and water. Most of them are benevolent, belonging to the so-called "normal flora," and they do not represent disease.

The system develops antibodies against disease-causing as well as harmless bacteria.

After a disease, antibodies against the disease remain in the system, and their amount generally decreases with time.

Bacterial diseases are generally defined by cultures; if bacteria isolated from the system start to grow in a special medium, the disease agent has

been found. A culture is considered a more reliable method than demonstrating the disease indirectly on the basis of antibodies produced against the microbe. How reliable these antibody studies are is being disputed in the Pieksamaki disease.

Timo Kosunen says that bacterial antibody studies are complicated. They are more difficult when a rather new bacterium is involved and not much is known about its occurrence in the general public. The situation is not made any easier by the fact that research centers use different methods for identifying microbial diseases.

For example, a laboratory test might be so sensitive that some other bacterium could be caught in the "net" than the one being sought. In this case, the specificity or accuracy of the test suffers. A laboratory test might also be so insensitive, that no bacterial antibody is found. In addition, it is difficult to tell whether antibodies from the blood result from disease or from quite ordinary contact bacteria.

In order to simplify the interpretation of antibody studies, attempts have been made to establish international criteria. According to the National Health Institute, by these criteria no signs of Legionnaires' disease have been demonstrated in the Pieksamaki blood samples.

9611

cso: 5400/2538

TYPHOID OUTBREAK--Georgetown, Guyana, Aug 6, CANA--Guyana's health officials are battling an outbreak of typhoid on the left bank of the Demerara River, according to chief medical officer Walter Chin. About 100 cases of the water borne disease were reported in an area called Herstelling, three miles south of here, Dr Chin said. "The use of water from an old reservoir in the neighbourhood was most likely responsible for the cases of typhoid in the area,' he remarked. He also said the deliberate breaking of water mains, in areas of low water pressure, could have contributed to the incidence of typhoid. Dr Chin called on residents to take appropriate precautionary measures, including "the proper washing of all vegetables and the boiling of all drinking water before use." The outbreak was the second major setback to the health sector in recent months. Health officials said that more than 600 children under six years were treated for malnutrition in June. Opposition politicians claimed that those figures represented only a part of the grim picture. They said several adults were also suffering from malnutrition. [Text] [Bridgetown CANA in English 1855 GMT 6 Aug 84 FL]

CSO: 5440/022

# MAHARASHTRA MINISTER WRITES ON LEPROSY PREVALENCE

Bombay THE TIMES OF INDIA in English 10 Jul 84 p 6

[Text] New Delhi, July 9 (PTI)—As against the Centre's target of 2000 AD for ensuring "health for all," the Maharashtra government has set a target date of 1991 to eradicate leprosy from the state, according to the state health minister. Dr Lalita Rao.

In an article in the state government publication, LOKRAIYA, Dr Rao says the national leprosy control programme has been in existence for the last 25 years and Maharashtra has always been in the forefront in implementing the programme.

"In fact, the pioneering work done by some voluntary agencies in the state has served as a useful model not only for other states but even at the national level," Dr Rao says.

The article says that India has the dubious distinction of having about four million of the estimated 12 to 15 million leprosy patients in the world. In spite of sustained efforts by the government as well as voluntary agencies, the disease has still not been overcome in the country.

"Though the government of Maharashtra has to its credit one of the best organised control programmes in the country, the prevalence of leprosy in this state was still appreciably high. Recent estimates show that 16 out of the 29 districts are still having a prevalence rate of more than five per 1,000 with four districts having a rate of more than ten per 1,000. In the slums of Bombay, it was about 12 per 1,000, it says.

The concern of the state government reflected in the appointment of a study team on leprosy situation in the state, as recommended by the centre's working group on leprosy headed by Dr. M.S. Swaminathan.

As recommended by this group, the state government had also repealed the obsolete Lepers' Act of 1898 with effect from January 26, Maharashtra being the first to do so in the country.

CSO: 5450/0070

'BRAIN FEVER' DEATHS--Madurai, July 3--Four children, from Thanjakkur near Tiruppuvanam in Ramnad district, admitted to the Government Rajaji Hospital here for brain fever have died in the last five days. Of the eight other children hospitalised here, three were discharged and the rest are undergoing treatment. Four teams of specialists from various institutions have been pressed into service to take all precautionary measures to contain the incidence of the disease in the village. [Text] [Madras THE HINDU in English 4 Jul 84 p 12]

CHOLERA CASES REPORTED——(TOINS)——Yavatmal district has been declared a "cholera threatened" area by the collector, Mr Ramesh Kumar. This follows reports of some cases of cholera and gastroenteritis in the adjoining Akola and Amravati districts. [Text] [Bombay THE TIMES OF INDIA in English 6 Jul 84 p 7]

AHMEDABAD HEPATITIS CASES--(UNI, Ahmedabad)--The hepatitis-B virus toll during the last six months rose to 430 with four more deaths on Monday. The Ahmedabad deputy municipal commissioner, Mr P.U. Asnani, said that five new cases were admitted to hospitals where over 100 patients were undergoing treatment.

[Text] [Bombay THE TIMES OF INDIA in English 11 Jul 84 p 13]

CHOLERA OUTBREAK REPORTED--(PTI)--A woman died and five persons fell ill in Ekambe village in Koregaon Taluka due to outbreak of cholera, according to a report received from district health officer, Dr Sudhir Hapali on Tuesday.

[Text] [Bombay THE TIMES OF INDIA in English 12 Jul 84 p 20]

DYSENTERY IN MIDNAPORE--Midnapore, July 11--Nearly 150 people, mostly children, have been affected by dysentery in this district, according to reports received here today. At least 80 people, including children from Kharagpur, Jhargram, Debra, Haur, Sabang, Midnapore and adjoining areas of Contai and Ghatal are undergoing treatment at private nursing homes and hospitals in the district. [Text] [Calcutta THE TELEGRAPH in English 12 Jul 84 p 2]

CHOLERA EPIDEMIC IN MAHARASHTRA—New Delhi, July 23 (AFP)—An epidemic of cholera has hit some 100 villages in west Indian coastal state of Maharashtra, prompting authorities to announce emergency medical measures, a PRESS TRUST OF INDIA (PTI) report said today. The whole of Sawantwadit Tehsil (cluster of villages) was declared a cholera epidemic area yesterday, PTI said quoting health authorities. There was no report of any deaths but more than 560 people have been affected by the deadly disease, health officials said. A special cholera control cell had been set up in the area and medical aid was being sent from the state capital Bombay. [Excerpt] [Hong Kong AFP in English 23 Jul 84 BK]

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NEPAL

#### BRIEFS

DEATHS FROM VIRAL ENCEPHALITIS--Katmandu, July 28 (AFP)--Three persons including a child have died of viral encephalitis in Nepalganj, 390 kilometers (241 miles) southwest of Katmandu, an official source said today. According to the Bheri zonal hospital, five children are undergoing treatment for the disease at the hospital. Efforts are being made by local authorities, social workers and the zonal and district administration to contain the disease, which created havoic in Katmandu last year and early this year. Vaccinations in the 657,000 population Katmandu valley have helped to control the current outbreak. [Text] [Hong Kong AFP in English 1017 GMT 28 Jul 84 BK]

# HYBRIDOMAS SECRETING POLIO ANTIBODIES REPORTED

Beijing ZHONGGUO YIXUE KEXUEYUAN XUEBAO [ACTA ACADEMIAE MEDICINAE SINICAE] in Chinese No 3, 1984 p 161

[Article by Gu Fangzhou [7357 2455 5297], Mu Guifan [3092 2710 5672] and Wang Youan [3769 1635 1344], all of the Institute of Basic Medical Sciences, WHO Collaborating Center for Research and Training in Immunology, Faculty of Basic Medicine of the Capital Medical College of China, Beijing: "Establishment of 25 Hybridomas Secreting Monoclonal Antibodies Against Type I Polio Viruses (Sabin Strain) and Their Application in Antigenic Analysis"]

[Summary] Twenty-five hybridomas secreting monoclonal antibodies (McAb) against Sabin Type I poliovirus (LSc2ab) have been established. Antibodies from seven hybridomas were positive in indirect immuno-fluorescence tests, while the others possessed virus neutralizing activity. They could be divided into three groups according to their degree of specificity in neutralization and indirect immuno-fluorescent reaction, namely, type-specific, strain-specific and intermediate. Clone L76 reacted positively not only with 10 polio-type I strains tested, but also gave positive fluorescence with type 2 virus (MEF-I strain). Strain-specific McAbs can be used in sero-differentiation of Sabin and non-Sabin strains. McAb(E8) obtained with virulent Brunhilde strain also can be used for this purpose. Preliminary antigenic analysis of polio type I strains tested is presented.

9717

MECHANICAL TRANSMISSION OF RIFT VALLEY FEVER VIRUS REPORTED

Marshalltown SOUTH AFRICAN JOURNAL OF SCIENCE in English Jun 84 p 276

[Text]

A striking feature of epizootics of Rift Valley fever (RVF) among sheep on the inland plateau of South Africa is the rapidity with which infection sometimes spreads through flocks, causing heavy losses. To account for this high level of infection it seemed that conventional biological transmission by mosquitoes might be augmented by mechanical transmission mediated by various biting flies, probably most efficiently performed through interrupted blood-meals. Our field studies<sup>1-3</sup> have shown only low infection rates in the mosquito vectors during such epizootics, usually not greater than one infected mosquito per 1000 and, furthermore, high vector competence evidently requires high viraemia levels in the vertebrate host.<sup>2-4</sup> We report here the results of laboratory experiments which show that mosquitoes can transmit RVF virus mechanically.

Syrian hamsters, used to infect mosquitoes from laboratory colonies, were inoculated with the AN 1830 strain of RVF virus in its 3rd or 5th intracerebral mouse passage level and were bled for virus titration 30 hours later at peak viraemia. Titrations were done in infant mice and virus concentrations expressed as the log LD<sub>50</sub> per 1.0 ml. After bleeding, the hamsters were exposed to single or groups of mosquitoes which were permitted to engorge only partially. These mosquitoes were then held for varying intervals at 80% relative humidity and 26°C before being allowed to complete their blood-meals on uninfected hamsters, which died within three days from RVF virus infection if transmission occurred. Some of the transmissions were confirmed as due to RVF virus by passage of the hamster's liver in infant mice.

The results for two experiments with Aedes aegypti formosus are shown in Table 1: successful transmission was achieved by groups of mosquitoes up to 25 minutes after the infective feed but not after 5.5 hours. After shorter intervals, single mosquitoes were also shown to transmit on four occasions. In further experiments, not shown in the table, two Culex quinquefasciatus successfully transmitted two minutes after an infective feed on a hamster with a viral titre of 7.3 logs, whereas 8 Culex theileri which had fed on a hamster with a titre of 9.7 logs failed to transmit 30 minutes later as did single mosquitoes in eight other separate attempts.

These tests indicate that most species of mosquito would pro-

Table 1. Mechanical transmission between hamsters by Aedes aegypti formosus.

	-		
Titre of infecting hamster (logs per ml)	No. of mosquitoes	Interval after infective feed	Transmission
7.3	15	2 min	positive
	14	3 min	positive
•	1	3 min	positive
	1	4 min	positive
	1.	5 min	positive
	1	5 min	negative
	14	5 min	positive
	14 ·	5 min	positive
	27	6 min	positive
	15	7 min	positive
	15	9 min	positive
	15	25 min	positive
> 10.7	17	5.5 h	negative
	16	24.5 h	negative

bably transmit RVF virus mechanically following interrupted feeds, provided the infecting animal was highly viraemic and the interval between feeds was short. Since interrupted blood-meals probably occur frequently within densely packed flocks, it seems likely that mechanical transmission is an important alternative means of viral transmission during rural epizootics. Other biting flies such as *Culicoides, Stomoxys*, Simuliidae and Tabanidae are also possible vectors of RVF virus.

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RABIES SPREADS--RABIES continues to spread through Natal with another case in the Umhlali area--the first there this year. A total of 56 rabies cases have been reported in the province in 1984. Affected areas include Kloof, Pinetown, Waterfall, New Germany, Hillcrest and Clairmont, as well as many areas of KwaZulu. Dr H. Thorogood, Durban's State Vet, said a stray, an "Africantype" dog, attacked workers at a cane-loading bay at Umhlali without provocation, but did not bite anyone. He said the State's present vaccination scheme was having a good response. "I am satisfied that enough dogs are being inoculated to contain the disease. "We are particularly pleased by the number of young dogs being brought forward," he said. But the decision by the State to increase from one to three years the period between compulsory inoculation of pets was sharply criticised today. Pinetown's Medical Officer of Health, Dr Liz Standing, said this would make administration in rural areas impossible. "You cannot tell someone in these areas that he need not have his dog done this year because it was inoculated last year. "It must be all or nothing in these areas," said Dr Standing. The new, very serious threat to emerge in the rabies outbreak that has already killed four people in Natal stems from the squatter-type settlements on the outskirts of Pinetown. The rabies scare increased yesterday with the finding of three rabid animals on the outskirts of Durban. [Text] [Durban THE DAILY NEWS in English 17 Jul 84 p 1]

#### GOVERNMENT SPENDING LEVELS CALLED THREAT TO NATION'S HEALTH

London THE DAILY TELEGRAPH in English 6 Jul 84 p 12

[Article by James Allan]

[Text] THE Health Service would steadily decline putting the nation's health seriously at risk unless the Government increased its spending on the service, the T U C said yesterday.

It chose the 36th anniversary of the setting up of the N H S and the day on which the Commons was debating the health service to launch a highly critical policy document entitled "The Growing Gap."

Publication of the document was accompanied by a country-wide series of events, including rallies and carnivals, Press conferences, demonstrations and hospital open days.

Threequarters of a birthday cake was handed in at 10 Downing Street while in the East Midlands outsize "Get Well Soon" cards were delivered to district health authorities.

The policy document said that if present Government policies were maintained, the Health Service would be ±549 million short of the amount needed to maintain existing services at their present level. But even these were inadequate, it aserted.

Compared with its neighbours, Britain lagged behind in the proportion of national income devoted to health care.

West Germany and France for instance, spent eight per cent. of national income in 1980 and America 9.5 per cent. while Britain devoted only 5.7 per cent.

Privatisation Criticised

The T U C was highly critical of the policy of privatising support services which, it said, "will lead to a serious deterioration in health-care standards with the replacement of experienced ancilary staff by casual and temporary workers on poverty wages."

Privatisation posed a threat to patient and staff safety.

"Health hazards and the danger of cross infection easily arise from lower standards of cleanliness which are chiefly the results of inadequate and irregular staffing arrangements."

The statement said: "The range and scope of N H S services are being gradually eroded by the failure to match N H S needs and resources.

"The most likely consequence is that current difficulties will become commonplace

"It will aggravate the shortage in manpower and equipment, lengthen waiting lists, allow further deterioration of hospitals and other buildings and accelerate the closure and withdrawal of services.

Speaking on TV - am yesterday, Mr Rodney Bickerstaffe, general secretary of the National Union of Public Employees, said: "There are over 800,000 people waiting for hospital treatment and yet we have 8,000 or 9,000 qualified nurses on the dole and thousands of doctors unemployed.

'Not Happy Birthday'

"We know that everywhere hospital wards are being closed and that treatment is not being given. It is not a very happy birthday."

Mr. Clarke, Health Minister, denied the claims made by union leaders. He said: "We are going to increase spending on the Health Service and that will enable us to carry on what we are doing now."

Spending on the N H S was one per cent. above inflation.

It is a fact that we are treating more patients all the time and waiting lists are getting shorter.

"We are opening new hospitals all the time as well as closing old and redundant ones."

CSO: 5440/016

# GOVERNMENT URGES INCREASE IN VACCINATIONS FOR MEASLES

London THE DAILY TELEGRAPH in English 16 Jul 84 p 6

[Article by David Fletcher]

[Text] MEASLES is not the trivial childhood disease parents so often suppose, but a potential child killer, the Office of Health Economics says in a report today.

Urging increased levels of vaccination against measles, it says the disease is 50 times more common in England and Wales than in America.

The difference is so marked because measles vaccination is almost universal in the United States.

Only about half the child population in England and Wales is faccinated against the disease.

The report says that a key requirement is to increase awareness of the potential dangers of measles.

Over 100,000 cases were notified to health authorities last year and the report says that 15 to 20 children died.

A further 500 to 600 suffered convulsions and five children have been left brain damaged.

It says that high vaccination rates in America are because immunity is required as a condition to school entry.

Such compulsion may not be necessary in Britain because high levels of voluntary vaccination are achieved for diseases which parents perceive to be serious.

The report also stressed the need to encourage more girls aged 10-14 to be immunised against rubella, German measles. Unprotected women run the risk of having babies with birth defects.

A total of 83 per cent, of girls are immunised, but the report says this falls 12 percent short of the official target.

The Office of Health Economics is financed by the drugs industry to research the economic aspects of health care.

"Childhood Vaccination: current controversies," Office of Health Economics, 12 Whitehall, London SWIA 2 DY, Price &1.

CSO: 5440/021

### TUBERCULOSIS BIGGEST SINGLE KILLER DISEASE IN HARARE

Harare THE HERALD in English 28 Jul 84 p 3

[Text] TUBERCULOSIS is now the single biggest cause of death in Harare's hospitals and is responsible for high bed occupancy, says the City Medical Officer of Health, Dr Lovemore Mbengeranwa, in his latest quarterly report.

Dr Mbengeranwa said the disease had resulted in the deaths of seven patients while another 188 were being cared for during the first quarter of the year. "No other disease caused deaths at that rate," he said.

Other diseases cared for at infectious diseases hospitals were measles, hepatitis and typhoid.

The MOH said most positions for dentists had not been filled despite expansion of dental health services. Dzivaresekwa was earmarked for the next dental primary care clinic.

The programme of integrating maternal and child health services was gaining momentum. Integrating family planning into the daily maternal and child health service was now almost complete.

The opening of clinics at Parirenyatwa Hospital, Southerton, Mbare, Highfield, and several others showed the expansion of these services, and there was no increase in the number of patients in the clinics.

Dr Mbengeranwa felt the total clinic attendance was dropping due to "a steady improvement in the health of our population". But he noted that as the country was experiencing drought problems, a number of people had drifted to the city and the water rationing scheme was posing new problems.

People were washing in rivers or digging shallow wells to ease the problem of paying high water accounts.

Dr Mbengeranwa also said tuckshops, which had become prevalent in Glen View and Warren Park and other high-density areas, had continued to sell food items which caused gastroenteritis and other stomach ailments. He said the tuckshop owners had no washing facilities.

Meat and foods were being cooked under unhygienic conditions particularly in and outside some beerhalls in the high-density areas of Harare.

The care of swimming pools had also deteriorated, partly because the owners could no longer top up due to water shortage.

CATTLE DISEASE EPIDEMIC--DINAJUR, June 23:--Cattle disease has broken out in an epidemic form in some parts of Parbatipur upazila. Hundreds of cattle head have died of the disease. The most affected areas are Harirampur, Uttar Bisnupur, Purba Hussainpur, Palashbari, Kalikapur, Bara Kanchena and Purba Durgapur villages. People expect the relevant authorities to take immediate preventive measures to control the disease. [Text] [Dhaka THE BANGLADESH OBSERVER in English 25 Jun 84 p 7]

CSO: 5450/0075

#### VETERINARIANS BURN CATTLE CARCASSES

Gaborone BOTSWANA DAILY NEWS in English 18 Jul 84 p 2

# [Article by Tarcisius Mudongo]

[Text]

FRANCISTOWN, JULY 11: Officials of the Veterinary Department from Orapa were busy burning carcases of wild beasts and cattle in the Boteti area from drought effects as a clean up measure and already thousands of carcases have been removed from the Mopipi dam and Lake Dow.

The Orapa-based senior livestock officer Mr Christopher Gaobotshetse said in an interview that the aim was to prevent botulism and other diseases from attacking livestock and the carcases were a health hazard.

The exercise could however be disrupted by the foot and mouth campaign which is to start from August 21 and should last for several months in that area, he noted:

The clean up campaign which started early this month could have proved a success were it not for the high rate of cattle mortality, he said.

Cattle were dying in large numbers at an average of two or three per day, he said.

The Orapa Community was now getting water from the nearby boreholes because some

cattle died in the dam, he added.

Mr Gaobotshetse said it was essential for his department to remove the carcases from the area because cattle were known to eat anything during drought periods, like bones of dead animals and they were therefore likely to spread botulism.

Now that the Boteti River was starting to flood, the Department felt that the carcases should be removed.

Meanwhile, Veterinary officials in Francistown have disclosed that the <u>Dukwi</u> quarantine will start accepting cattle from the surrounding area from July 27 and August 3 and 10.

Aspokesman for the Veterinary Office here said that about 650 cattle would be accepted at the quarantine each week and permits could be obtained from that Veterinary office here on Mondays and Tuesdays.

The spokesman mentioned that permits would be issued to cattle owners on Wednesdays, Thursdays and Fridays at Dukwi.

The cattle would then be taken to the Botswana Meat Commission after spending three weeks in quarantine, he added.

#### TUBERCULOSIS FOUND AMONG DAIRY CATTLE IN TOBAGO

Port-of-Spain TRINIDAD GUARDIAN in English 24 Jul 84 p 3

[Text] THE ENTIRE herd of 58 head of dairy cattle has been destroyed following the outbreak of tuberculosis at the Hope Dairy Farm in Tobago.

This has been announced by the Ministry of Agriculture, Lands and Food Production. The announcement states:

During the months of February, April, and June 1984, tuberculin tests were conducted by Veterinary Officers on the herd at Hope Dairy Farm, Tobago. This herd comprises 57 heifers and cows and one bull. Tuberculin testing was previously conducted on the herd in 1981 and no positive cases were identified. However, one suspect case was discovered in 1982.

The source of infection has not been ascertained, but the possibilities are:

(a) through the introduction of positive cases (carriers) during the shipment of cattle to Tobago in late 1982, from importations from the United States.

Tuberculin testing has been conducted in Trinidad at Turure and Carlsen Field, where similar shipments of cattle from the United States were distributed, but all animals tested have been negative. However it is quite possible that a single carrier was among animals shipped to Tobago, which resulted in the spread of the disease to the Hope Dairy Farm herd. Further testing of all possible contacts in Trinidad and Tobago is being conducted.

(b) Through workers on the Hope Dairy Farm who may have been old tuberculosis cases that became reactivated. There is a strong possibility that there were workers employed at the Hope Dairy Farm, who were once tuberculosis patients. These workers could serve as a source of infection to animals if the lesions became reactivated. It would, therefore, be necessary to conduct a comprehensive investigation into the clinical history of all workers at the Hope Dairy Farm over the past three years to ascertain their tuberculosis status.

The Director of Veterinary Services has taken the following steps in respect of the control and eradication of the disease:-

- (1) The entire herd of dairy cattle at the Hope Dairy Farm, Tobago which originally consisted of 58 manimals has been destroyed and disposed of.
- (2) the dairy unit, along with milking utensils etc. has been disinfected.
- (3) The other animals on the farm, inclusive of the beef herd, dairy heifers, pigs and goats are being tested for tuberculosis. This testing programme is being expanded to include, as a first priority, other dairy farms in Tobago, particularly those farms that may have received imported cattle from the United States over the past three years. Parallel to these investigations, a similar programme of testing is being conducted in Trinidad.
- (4) The sale of milk at the Hope Dairy Farm in Tobago has been terminated.
- (5) As a precautionary measure, the Ministry of Agriculture, Lands and Food Production is considering prohibiting the sale of raw milk from any of its institutions, in Trinidad and Tobago, e.g. ECIAF, Centeno Livestock Station etc.
- (6) Investigations are continuing on the identification of the source of infection. To this end, it is imperative to have the Mycobacterium isolated and classified. The Veterinary Officer, Tobago has already submitted samples to the Veterinary Diagnostic Laboratory, Curepe, for transmission to the United States.
- (7) The Ministry of Agriculture, Lands and Food Production is in contact with the Ministry of Health, in order that a tuberculosis testing programme can be conducted on all workers employed on the Hope Dairy Farm over the past three years, and as a general rule, for the Ministry of Health to conduct annual medical examinations inclusive of Tuberculosis testing of all workers employed on all dairy farms in Trinidad and Tobago.

CSO: 5440/020

#### RABIES VACCINATION CAMPAIGN

Harare THE HERALD in English 11 Jul 84 p 1

[Text] THE Mashonaland Provincial Veterinary Office is to launch a rabies vaccination programme in Harare's low and high-density suburbs on Monday.

The provincial veterinary officer, Mr Robert Basson, appealed to dog owners to bring their dogs for vaccination.

In the low-density areas vaccinations can be done at district offices except for Belvedere where dog owners can call at the Post Office. The teams will call at Greendale on Monday, Highlands on Tuesday, Borrowdale on Wednesday, Mt Pleasant on Thursday, Marlborough on Friday, followed by Mabelreign, Waterfalls, Hatfield and Belvedere on successive days of the following week.

In the high-density areas, a team will be at Zengeza 2 shopping centre on Monday, St Mary's Huruyadzo Centre on Tuesday, Mabvuku Rufaro Hall on Wednesday. Dzivaresekwa area head office on Thursday and Mufakose area head office on Friday.

Glen Norah Municipal Hall, Mbare Stodart Hall and Warren Park shopping centre will be visited on successive days from July 23.

Another team will be at Seke North and South council offices on Monday July 23, followed by Tafara, Kambuzuma, Highfield and Glen View on successive days.

On July 30, they will be at Epworth Mission office, followed by Lochinvar Clinic and Southerton School.

CARIBBEAN ROOT CROP DISEASE—The Antigua based sub-regional headquarters of the Caribbean Agricultural Research and Development Assistance Programme to the Caribbean. [sentence as published] Project co-ordinator, Mr. Vernon Seargent said Cardi's latest project is a study into the cause of tannia disease, the killer of most root crops in the windward Islands. It is being carried out by Plant Pathology expert Dr. Samuel Net-Thung in Dominica, and is financed by the European Economic Community. Mr. Seargent note that the objective behind the exercise is to identify the organism which causes the premature dying of tannia plants such as arrowroots, plantains and dasheen. The disease also affects the yield of other crops and according to Mr. Seargent the study will be followed by a workshop for small farmers, scientists and other specialists to give them an insight of preventative measures. [Text] [St John NATION'S VOICE in English 7 Jun 84 p 10]

CSO: 5440/018

RICE HISPA INFESTATION—KUSHTIA, July 11:—Over 45,000 acres of cropland in 12 upazilas of Kushtia, Meherpur and Chuadanga districts have been badly infested by a strange kind of insect known as Rice Hispa. An official of the local Agricultural Extension Department told our Kushtia correspondent that the pest attack which took a serious turn might cause severe damage to standing aus, broadcast aman and other paddy crops seriously affecting the total rice production of the district. The official said four years back there was a pest attack in Kushtia district but the extent of damage was not severe. Meanwhile the government has taken effective measures to control pest epidemic by distributing over 5,000 pounds of insectiside free of cost. The government also supplied 450 hand sprayers and one hundred power sprayers to the affected areas. Each Upazila Administration has also taken various measures to stem this menace. The official told this correspondent that the government has taken steps for aerial spray of insecticide as the pest attack was colossal. [Text] [Dhaka THE BANGLADESH OBSERVER in English 12 Jul 84 p 1]

CSO: 5450/0082

RICE CROP HIT--Madras, July 3--'Tungro,' a serious viral disease of rice, has been noticed in several hectares in Chingleput and North Arcot districts. Almost all varieties of rice grown in this region have been affected. Sornavari crop (the summer crop) in Polur, Chetput, Arni and Kancheepuram belts have been severely affected by this crippling disease. Scientists have noticed the presence of bacterial leaf blight (another major rice disease) in Tungro-infested fields. An insect-transmitted virus disease, Tungro stunts plant growth, and changes leaf colour from green to orangish or brownish yellow. Young leaves often are mottled or have pale green to white striples of different lengths running parallel to the veins. Infected plants usually live until maturity, and flowering and yields will be seriously affected. Panicles will be reduced and grains turn shrivelled. Younger plants are ready victims to the disease, and older plants may not develop typical symptoms of the infection. It is considered the most important virus disease of rice in tropical Asia, and outbreaks can destroy large area of the crop in a short time. "Tungro" spread can be arrested by eliminating green jassides, the insect that carries the disease from plant to plant. Farmers in the affected area are taking up spraying with Metasytox to control the pest, and they follow prophylactic sprayings in the nurseries to avoid the incidence of the disease. [Text] [Madras THE HINDU in English 4 Jul 84 p 12]

CSO: 5450/0067

MALAYSIA

#### BRIEFS

COCONUT INFESTATION REPORTED--KUALA TERENGGANU, Wed.--An insect known as the arthona is attacking coconut trees in six kampungs in the Hulu Nerus district. About 39 hectares of coconut trees have been affected and about 200 farmers have suffered financial losses, Terengganu agriculture director Ismail Ibrahim said today. The affected villages are Kampung Guntung, Lerek, Petaling, Banggol Binjai, Bukit Nangka and Banggol Nyiur. Encik Ismail said his department had taken steps to contain the infestation. He said azodrin had been injected into unaffected trees and this had helped to contain the problem. As a further measure, Encik Ismail advised farmers to smoke out the insects from the coconut trees. [Textl [Kuala Lumpur NEW STRAITS TIMES in English 28 Jun 84 p 10]

VIETNAM

#### BRIEFS

INSECTS INFEST RICE CROPS—The summer-fall rice cultivation season is now over. However, in a few localities it is developing poorly because of harmful insects. In the south, more than 70,000 hectares of summer-fall rice, including about 30,000 hectares in the Meking Delta provinces, have been infested with harmful insects. Almost all provinces which have completed harvesting the early summer-fall rice crop have achieved a fairly high paddy output. This year, due to the delay in winter-spring rice cultivation and to various difficulties, selection and use of rice seeds in some areas have not been carried out properly, thus causing rice pests to prevail. The rice acreage affected by rice pests in the northern provinces has reached 70,000 hectares, or nearly 9.1 percent of the planted acreage, including nearly 20,000, more than 10,000, and 7,000 hectares respectively in Binh Tri Thien, Ha Bac, and Nghe Tinh. The affected acreage in other provinces varies from 1,000 to 2,000 hectares. [Text] [OWO10951 Hanoi Domestic Service in Vietnamese 1100 GMT 30 Jul 84]

CSO: 5400/4446

END